

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

Sheet

1

of

6

Application Number

**Complete if Known**

10/510.667

**Filing Date**

**October 7, 2004**

**First Named Inventor**

**Vasulinga Ravikumar**

**Art Unit**

~~To Be Determined~~ 1635

**Examiner Name**

To Be Determined Tracy Vivkenper

Attorney Docket Number

|S|S-5582

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner  
Signature**

Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

***If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.***

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 6

**Complete if Known**

Application Number	10/510,667
Filing Date	October 7, 2004
First Named Inventor	Vasulinga Ravikumar
Art Unit	To Be Determined
Examiner Name	To Be Determined
Attorney Docket Number	ISIS-5582

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
TV	AC	ALEFELDER, S. et al., "Incorporation of terminal phosphorothioates into oligonucleotides," <i>Nucleic Acids Res.</i> (1998) 26(21): 4983-4988.	
	AD	ALTMANN, K.-H. et al., "Second Generation of Antisense Oligonucleotides: From Nuclease Resistance to Biological Efficacy in Animals," <i>Chimia</i> (1996) 50: 168-176.	
	AE	ALTMANN, K.-H. et al., "Second-generation antisense oligonucleotides: structure-activity relationships and the design of improved signal-transduction inhibitors," <i>Biochem. Soc. Trans.</i> (1996) 24: 630-637.	
	AF	ALTMANN, K.-H. et al., "Second Generation Antisense Oligonucleotides - Inhibition of PKC- $\alpha$ and <i>c-RAF</i> Kinase Expression by Chimeric Oligonucleotides Incorporating 6'-Substituted Carbocyclic Nucleosides and 2'-O-Ethylene Glycol Substituted Ribonucleosides," <i>Nucleosides Nucleotides</i> (1997) 16(7-9): 917-926.	
	AG	BAKER, B. F. et al., "2'-O-(2-Methoxy)ethyl-modified Anti-intercellular Adhesion Molecule 1 (ICAM-1) Oligonucleotides Selectively Increase the ICAM-1 mRNA Level and Inhibit Formation of the ICAM-1 Translation Initiation Complex in Human Umbilical Vein Endothelial Cells," <i>J. Biol. Chem.</i> (1997) 272(18): 11944-12000.	
	AH	BEAL, P. A. et al., "Second Structural Motif for Recognition of DNA by Oligonucleotide-Directed Triple-Helix Formation," <i>Science</i> (1991) 251: 1360-1363.	
	AI	BOCK, L. C. et al., "Selection of single-stranded DNA molecules that bind and inhibit human thrombin," <i>Nature</i> (1992) 355: 564-566.	
	AJ	CHERUVALLATH, Z. S. et al., "A Novel Solid Support for Synthesis of Oligonucleotide 3'-Phosphorothioate Monoesters," <i>Bioorg. Med. Chem. Lett.</i> (2003) 13(2): 281-284.	
	AK	CHIANG, M.-Y. et al., "Antisense Oligonucleotides Inhibit Intercellular Adhesion Molecule 1 Expression by Two Distinct Mechanisms," <i>J. Biol. Chem.</i> (1991) 266(27): 18162-18171.	
*	AL	COHEN, J. in <i>Oligonucleotides: Antisense Inhibitors of Gene Expression</i> (1989) CRC Press, Inc., Boca Raton, FL.	
	AM	COOK, P. D., "Medicinal chemistry of antisense oligonucleotides - future opportunities," <i>Anti-Cancer Drug Des.</i> (1991) 6: 585-607.	
✓	AN	CONTE, M. R. et al., "Conformational properties and thermodynamics of the RNA duplex $r(\text{CGCAAUUUGCG})_2$ : comparison with the DNA analogue $d(\text{CGCAAATTTGCG})_2$ ," <i>Nucleic Acids Res.</i> (1997) 25(13): 2627-2634.	

\* A copy of these references will not be forwarded to the U.S. Patent and Trademark Office since it is believed to be too voluminous and easily obtainable by the Examiner.

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.88. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 3 of 6

**Complete if Known**

Application Number	10/510,667
Filing Date	October 7, 2004
First Named Inventor	Vasulinga Ravikumar
Art Unit	To Be Determined
Examiner Name	To Be Determined
Attorney Docket Number	ISIS-5582

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
TV	AO	CROOKE, S. T., "Progress in Antisense Therapeutics," <i>Med Res. Rev.</i> (1996) 16(4): 319-344.	
	AP	CROOKE, S. T. et al., "Pharmacokinetic Properties of Several Novel Oligonucleotide Analogs in Mice," <i>J. Pharmacol. Exp. Ther.</i> (1996) 277(2): 923-937.	
	AQ	DELGADO, C. et al., "The Uses and Properties of PEG-Linked Proteins," <i>Crit. Rev. Ther. Drug Carr. Sys.</i> (1992) 9(3,4): 249-304.	
	AR	DE MESMAEKER, A. et al., "Antisense Oligonucleotides," <i>Acc. Chem. Res.</i> (1995) 28: 366-374.	
	AS	EGLI, M. et al., "RNA Hydration: A Detailed Look," <i>Biochem.</i> (1996) 35(26): 8489-8494.	
	AT	FEDOROFF, O. Y. et al., "Structure of a DNA:RNA Hybrid Duplex Why RNase H Does Not Cleave Pure RNA," <i>J. Mol. Biol.</i> (1993) 233: 509-523.	
	AU	FREIER, S. M. et al., "The ups and downs of nucleic acid duplex stability: structure-stability studies on chemically-modified DNA:RNA duplexes," <i>Nucleic Acids Res.</i> (1997) 25(22):4429-4443.	
	AV	GONZÁLEZ, C. et al., "Structure and Dynamics of a DNA-RNA Hybrid Duplex with a Chiral Phosphorothioate Moiety: NMR and Molecular Dynamics with Conventional and Time-Average Restraints," <i>Biochem.</i> (1995) 34(15): 4969-4982.	
	AW	GRIFFIN, L. C. et al., "In Vivo Anticoagulant Properties of a Novel Nucleotide-Based Thrombin Inhibitor and Demonstration of Regional Anticoagulation in Extracorporeal Circuits," <i>Blood</i> (1993) 81(12): 3271-3276.	
	AX	HAKIMELAHI, G. H. et al., "New catalysts and procedures for the dimethoxytritylation and selective silylation of ribonucleosides," <i>Can. J. Chem.</i> (1982) 60: 1106-1113.	
	AY	HAMM, M. L. et al., "Incorporation of 2'-Deoxy-2'-mercaptocytidine into Oligonucleotides via Phosphoramidite Chemistry," <i>J. Org. Chem.</i> (1997) 62(10): 3415-3420.	
	AZ	HORTON, N. C. et al., "The Structure of an RNA/DNA Hybrid: A Substrate of the Ribonuclease Activity of HIV-1 Reverse Transcriptase," <i>J. Mol. Biol.</i> (1996) 264: 521-533	
	BA	JONES, L. J., et al., "RNA Quantitation by Fluorescence -Based Solution Assay: RiboGreen Reagent Characterization," <i>Anal. Biochem.</i> (1998) 265: 368-374.	

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

4

of

6

**Complete if Known**

Application Number	10/510,667
Filing Date	October 7, 2004
First Named Inventor	Vasulinga Ravikumar
Art Unit	To Be Determined
Examiner Name	To Be Determined
Attorney Docket Number	ISIS-5582

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
TV	BB	KABANOV, A. V. et al., "A new class of antivirals: antisense oligonucleotides combined with a hydrophobic substituent effectively inhibit influenza virus reproduction and synthesis of virus-specific proteins in MDCK cells," <i>FEBS Lett.</i> (1990) 259(2): 327-330.	
	BC	KAWASAKI, A. M. et al., "Uniformly Modified 2'-Deoxy-2'-fluoro Phosphorothioate Oligonucleotides as Nuclease-Resistant Antisense Compounds with High Affinity and Specificity for RNA Targets," <i>J. Med. Chem.</i> (1993) 36(7): 831-841.	
	BD	LANE, A. N. et al., "NMR assignments and solution conformation of the DNA-RNA hybrid duplex d(GTGAACCTT)-r(AAGUUCAC)," <i>Eur. J. Biochem.</i> (1993) 215: 297-306.	
	BE	LEFEBVRE, I. et al., "Mononucleoside Phosphotriester Derivatives with S-Acyl-2-thioethyl Bioreversible Phosphate-Protecting Groups: Intracellular Delivery of 3'-Azido-2',3'-dideoxythymidine 5'-Monophosphate," <i>J. Med. Chem.</i> (1995) 38(20): 3941-3950.	
	BF	LESNIK, E. A. et al., "Relative Thermodynamic Stability of DNA, RNA, and DNA:RNA Hybrid Duplexes: Relationship with Base Composition and Structure," <i>Biochem.</i> (1995) 34: 10807-10815.	
	BG	LETSINGER, R. L. et al., "Cholesteryl-conjugated oligonucleotides: Synthesis, properties, and activity as inhibitors of replication of human immunodeficiency virus in cell culture," <i>Proc. Natl. Acad. Sci. USA</i> (1989) 86: 6553-6556.	
	BH	LORSCH, J. R. et al., "Reverse transcriptase reads through a 2'-5' linkage and a 2'-thiophosphate in a template," <i>Nucleic Acids Res.</i> (1995) 23(15): 2811-2814.	
	BI	MANOHARAN, M. et al., "Lipidic Nucleic Acids," <i>Tetrahedron Lett.</i> (1995) 36(21): 3651-3654.	
	BJ	MANOHARAN, M. et al., "Chemical Modifications to Improve Uptake and Bioavailability of Antisense Oligonucleotides," <i>Ann. N.Y. Acad. Sci.</i> (1992) 660: 306-309.	
	BK	MANOHARAN, M. et al., "Oligonucleotide Conjugates: Alteration of the Pharmacokinetic Properties of Antisense Agents," <i>Nucleosides Nucleotides</i> (1995) 14(3-5): 969-973.	
	BL	MANOHARAN, M. et al., "Cholic Acid-Oligonucleotide Conjugates for Antisense Applications," <i>Bioorg. Med. Chem. Lett.</i> (1994) 4(8): 1053-1060.	
✓	BM	MANOHARAN, M. et al., "Introduction of Lipophilic Thioether Tehter in the Minor Groove of Nucleic Acids for Antisense Applications," <i>Bioorg. Med. Chem. Lett.</i> (1993) 3(12): 2765-2770.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

5

of

6

**Complete if Known**

Application Number	10/510,667
Filing Date	October 7, 2004
First Named Inventor	Vasulinga Ravikumar
Art Unit	To Be Determined
Examiner Name	To Be Determined
Attorney Docket Number	ISIS-5582

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
TV	BN	MARTIN, P., "Ein neuer Zugang zu 2'-O-Alkylribonucleosiden und Eigenschaften deren Oligonucleotide," <i>Helv. Chim. Acta</i> (1995) 78: 486-504. <i>English Abstract only</i>	
	BO	MARTINEZ, J. et al., "Single-Stranded Antisense siRNAs Guide Target RNA Cleavage in RNAi," <i>Cell</i> (2002) 110: 563-574.	
	BP	MEI, H.-Y. et al., "Tris(9-tetramethylphenanthroline)ruthenium(II): A chiral probe that cleaves A-DNA conformations," <i>Proc. Natl. Acad. Sci. USA</i> (1988) 85: 1349-1353.	
	BQ	MILLER, P. S. et al., "A new approach to chemotherapy based on molecular biology and nucleic acid chemistry: Matagen (masking tape for gene expression)," <i>Anti-Cancer Drug Design</i> (1987) 2:117-128.	
	BR	MILLIGAN, J. F. et al., "Current Concepts in Antisense Drug Design," <i>J. Med. Chem.</i> (1993) 36: 1923-1937.	
	BS	MISHRA, R. K. et al., "Improved leishmanicidal effect of phosphorotioate antisense oligonucleotides by LDL-mediated delivery," <i>Biochim. Biophys. Acta</i> (1995) 1264: 299-237.	
	BT	MONIA, B. P. et al., "Evaluation of 2'-Modified Oligonucleotides Containing 2'-Deoxy Gaps as Antisense Inhibitors of Gene Expression," <i>J. Biol. Chem.</i> (1993) 268(19): 14514-14522.	
	BU	OBERHAUSER, B. et al., "Effective incorporation of 2'-O-methyl-oligofibonucleotides into liposomes and enhanced cell association through modification with thiocholesterol," <i>Nucleic Acids Res.</i> (1992) 20(3): 533-538.	
	BV	OUCHI, T. et al., "Synthesis and Antitumor Activity of Poly(Ethylene Glycol)s Linked to 5-Fluorouracil via a Urethane or Urea Bond," <i>Drug Design and Delivery</i> (1992) 9: 93-105.	
	BW	POLUSHIN, N. N. et al., "Synthesis of Oligonucleotides Containing 2'-Azido- and 2'-Amino-2'-deoxyuridine Using Phosphotriester Chemistry," <i>Tetrahedron Lett.</i> (1996) 37(19): 3227-3230.	
	BX	RAVASIO, N. et al., "Selective Hydrogenations Promoted by Copper Catalysts. 1. Chemoselectivity, Regioselectivity, and Stereoselectivity in the Hydrogenation of 3-Substituted Steroids," <i>J. Org. Chem.</i> (1991) 56(13): 4329-4333.	
	BY	ROLAND, A. et al., "A novel linker for the solid-phase synthesis of a library of 3'-thiophosphorylated dinucleotides," <i>Tetrahedron Lett.</i> (2001) 42: 3669-3672.	
✓	BZ	SAISON-BEHMOARAS, T. et al., "Short modified antisense oligonucleotides directed against Ha-ras point mutation induce selective cleavage of the mRNA and inhibit T24 cells proliferation," <i>EMBO J.</i> (1991) 10(5): 1111-1118.	

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

6

of

7

**Complete if Known**

Application Number	10/510,667
Filing Date	October 7, 2004
First Named Inventor	Vasulinga Ravikumar
Art Unit	To Be Determined
Examiner Name	To Be Determined
Attorney Docket Number	ISIS-5582

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
* TV	CA	SANGER et al., <i>Principles of Nucleic Acid Structure</i> (1984) Springer Verlag, New York, NY.	
	CB	SCHWARZ, D. S. et al., "Evidence that siRNAs Function as Guides, Not Primers, in the <i>Drosophila</i> and Human RNAi Pathways," <i>Mol. Cell</i> (2002) 10: 537-548.	
	CC	SEARLE, M. S. et al., "On the stability of nucleic acid structures in solution: enthalpy - entropy compensations, internal rotations and reversibility," <i>Nucleic Acids Res.</i> (1993) 21(9): 2051-2056.	
	CD	SHEA, R. G. et al., "Synthesis, hybridization properties and antiviral activity of lipid-oligodeoxynucleotide conjugates," <i>Nucleic Acids Res.</i> (1990) 18(13): 3777-3783.	
	CE	STEIN, C. A. et al., "Oligodeoxynucleotides as Inhibitors of Gene Expression: A Review," <i>Cancer Res.</i> (1988) 48: 2659-2668.	
	CF	SVINARCHUK, F. P. et al., "Inhibition of HIV proliferation in MT-4 cells by antisense oligonucleotide conjugated to lipophilic groups," <i>Biochimie</i> (1993) 75: 49-54.	
	CG	THOMSON, J. B. et al., "Synthesis and Properties of Diuridine Phosphate Analogs Containing Thio and Amino Modifications," <i>J. Org. Chem.</i> (1996) 61(18): 6273-6281.	
	CH	TSURUOKA, H. et al., "Synthesis and Conformational Properties of Oligonucleotides Incorporating 2'-O-Phosphorylated Ribonucleotides as Structural Motifs of Pre-tRNA Splicing Intermediates," <i>J. Org. Chem.</i> (2000) 65(22): 7479-7494.	
	CI	UHLMANN, E. et al., "Antisense Oligonucleotides: A New Therapeutic Principle," <i>Chem. Reviews</i> (1990) 90(4): 543-584.	
	CJ	WADA, T. et al., "Synthesis and Properties of N-Phosphorylated Ribonucleosides," <i>J. Am. Chem. Soc.</i> (1994) 116(22): 9901-9911.	
	CK	WADA, T. et al., "A Convenient Method for Phosphorylation Involving a Facile Oxidation of H-Phosphonate Monoesters via Bis(trimethylsilyl) Phosphites," <i>Tetrahedron Letters</i> (1998) 39: 7123-7126.	
	CL	WAGNER, R. W. et al., "Antisense Gene Inhibition by Oligonucleotides Containing C-5 Propyne Pyrimidines," <i>Science</i> (1993) 260: 1510-1513	
↓	CM	YOUNG, S. L. et al., "Triple helix formation inhibits transcription elongation <i>in vitro</i> ," <i>Proc. Natl. Acad. Sci. USA</i> (1991) 88: 10023-10026.	

\* A copy of these references will not be forwarded to the U.S. Patent and Trademark Office since it is believed to be too voluminous and easily obtainable by the Examiner.

Examiner Signature	/Tracy Vivlemore/	Date Considered	11/01/2006
--------------------	-------------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.